

CLAIMS

1. A videoconferencing system comprising:
 - (a) at least one video signal source;
 - (b) at least one video display device;
 - (c) at least one unshielded twisted pair of wires
 - (i) defining a UTP video communication path,
 - (ii) arranged for transport of video signals,
 - (1) originating at one of the signal sources,
 - (2) to at least one of the display devices;
 - (d) at least one processor
 - (i) capable of providing data conferencing signals; and
 - (e) at least one data communication path
 - (i) arranged for transmission of
 - (1) data conferencing signals,
 - (2) to one of the display devices,

wherein the system is configured to

- (ii) reproduce video images,
 - (1) based on the transported video signals,
 - (2) on one of the display devices, and
- (iii) display information,
 - (1) based on the carried data conferencing signals,
 - (2) on one of the display devices.

2. The system of claim 1, wherein the data communication path is defined by

- (a) at least one unshielded twisted pair of wires.

3. The system of claim 2, wherein:

- (a) images
 - (i) based on the video signals
 - (ii) can be reproduced
 - (iii) in a first window
 - (iv) on one of the display devices, and
- (b) information
 - (i) based on the data conference signals
 - (ii) can be displayed
 - (iii) in a second window
 - (iv) on the display device.

4. The system of claim 2, further comprising:

- (a) a control communication path,
wherein, the system is configured
 - (i) to respond to control signals
 - (1) transmitted over the control communication path
 - (ii) to control the display of the video images.

5. The system of claim 4, wherein

- (a) at least one unshielded twisted pair of wires defines both
 - (i) the data path, and

(ii) the control communication path.

6. The system of claim 4, wherein

- (a) at least two video display devices
 - (i) each have an associated processor
 - (ii) to each define a workstation, and

wherein the system is configured

- (i) to control the reproduction of video images and spoken audio
 - (1) of a first user of a workstation
 - (2) at the workstation of a second workstation user.

7. The system of claim 6, wherein

- (a) the information
 - (i) based on the data conferencing signals
- (b) can be displayed
 - (i) interactively.

8. The system of claim 7, wherein the system is configured to

- (a) reproduce the video images,
 - (i) at greater than 20 frames per second.

9. The system of claim 8, wherein

- (a) the video signals are transported in analog.

10. The system of claim 6, wherein the system is configured

- (a) to combine video images
 - (i) of at least a first and a second user

- (ii) into a mosaic image, and
- (b) to reproduce the mosaic image
 - (i) on one of the video display devices.

11. A teleconferencing system, for conducting a teleconference among a plurality of users, comprising:

- (a) a plurality of workstations
 - (i) each associated with at least one user,
 - (ii) each workstation including
 - (1) a video display device, and
 - (2) associated audio reproduction capabilities;
- (b) audio and video (AV) capture capabilities configured to capture
 - (i) video images and
 - (ii) spoken audio
 - (iii) of a workstation user; and
- (c) at least one unshielded twisted pair of wires defining
 - (i) a UTP data path
 - (1) along which data can be shared
 - (2) among the workstations, and
 - (ii) a UTP AV path,
 - (1) along which AV signals
 - a. representing user video images and audio
 - b. can be transported among the workstations,

wherein the system is configured to

- (i) interactively display images
 - (1) based on the shared data,

- (2) on at least two of the video display devices, and
- (ii) reproduce video images and spoken audio
 - (1) based on the AV signals,
 - (2) on at least one of the video display devices.

12. The system of claim 11, wherein:

- (a) images
 - (i) based on the video signals
 - (ii) can be reproduced
 - (iii) in a first window on one of the display devices, and
- (b) information
 - (i) based on the data conferencing signals
 - (ii) can be displayed
 - (iii) in a second window on the display device.

13. The system of claim 11, wherein

- (a) the reproduction
 - (i) of the video images and audio
 - (ii) is enabled by control signals transmitted
 - (1) over the UTP data path.

14. The system of claim 13, wherein

- (a) wherein the UTP data and UTP AV paths are separate.

15. The system of claim 14, wherein

- (a) the video signals are transported in analog.

16. The system of claim 14, wherein the system is configured to

- (a) reproduce the video images,
- (i) at greater than 20 frames per second.

17. The system of claim 15, wherein the system is configured

- (a) to combine video images
 - (i) of at least a first and a second user
 - (ii) into a mosaic image, and
- (b) to reproduce the mosaic image
 - (i) on a video display device.

18. The system of claim 16, wherein

- (a) the video images are reproduced in color.

19. The system of claim 11, wherein the system is configured:

- (a) to allow a first user
 - (i) to use a first graphical user interface
 - (ii) to select a user
 - (iii) from a plurality of users; and
- (b) to allow the first user

- (i) to use a second graphical user interface
- (ii) to select a collaboration type
- (iii) from a group of collaboration types; and

(c) to respond

- (i) by establishing communication
- (ii) of the selected collaboration type
- (iii) from the first user
- (iv) to the selected user.

20. A method of conducting a videoconference,
over at least one unshielded twisted pair of wires
defining a UTP video communication path,
using a system including
at least one video signal source,
at least one video display device,
at least one processor, and
at least one data communication path,
the method comprising the steps of:

- (a) generating video signals
 - (i) at one of the video signal sources;
- (b) transporting the generated video signals,
 - (i) over one of the UTP video communication paths,
 - (ii) to at least one of the display devices;
- (c) reproducing video images,
 - (i) based on the transported video signals,

- (ii) on the display device;
- (d) producing data conferencing signals
 - (i) at the processor;
- (e) transporting the data conferencing signals
 - (i) over one of the data communication paths,
 - (ii) to at least one of the display devices; and
- (f) displaying information,
 - (i) based on the transmitted data conferencing signals,
 - (ii) on the display device.

21. The method of claim 20, comprising the steps of:

- (a) reproducing the images
 - (i) based on the video signals
 - (ii) in a first window
 - (iii) on a display device, and
- (b) the information
 - (i) based on the data conference signals
 - (ii) in a second window
 - (iii) on this display device.

22. The method of claim 21, further comprising the steps of:

- (a) producing control signals;
- (b) transmitting the control signals
 - (i) over at least one control communication path,
- (c) controlling the display of the video images
 - (i) in response to the transmitted control signals.

23. The method of claim 22, wherein

- (a) at least one unshielded twisted pair of wires defines
 - (i) the data path, and
 - (ii) the control communication path.

24. The method of claim 20, wherein

- (a) at least two video display devices
 - (i) each have an associated processor
 - (ii) to each define a workstation, and

wherein the method includes the step of

- (a) controlling the reproduction of video images and spoken audio
 - (i) of a first user of a workstation
 - (ii) at the workstation of a second workstation user.

25. The method of claim 24, wherein

- (a) the information
 - (i) based on the data conferencing signals
 - (ii) can be displayed interactively on at least two display devices.

26. The method of claim 25, further comprising the step of:

- (a) reproducing the video images,
 - (i) at greater than 20 frames per second.

27. The method of claim 26, wherein

(a) the video signals are transported in analog.

28. The method of claim 25, further comprising the steps of

(a) combining video images

(i) of at least a first and a second user

(ii) into a mosaic image, and

(b) reproducing the mosaic image

(i) on a video display device.

29. A method for conducting a teleconference, among a plurality of users, over at least one unshielded twisted pair of wires defining both a UTP data path and a UTP AV path, and using a system including a plurality of workstations, each associated with at least one user and having a video display device, the method comprising the steps of:

(a) capturing

(i) video images and

(ii) spoken audio

(iii) of a workstation user;

(b) representing

(i) the captured user video images and audio

(ii) as AV signals

(c) transporting the AV signals

(i) over the AV path

(ii) among the workstations;

(d) reproducing video images and spoken audio

(i) based on the AV signals,

(ii) on at least one of the video display devices;

(e) transmitting data

(i) over the data path

(ii) among the workstations; and

(f) interactively displaying images

(i) based on the shared data,

(ii) on at least two of the video display devices.

30. The method of claim 29, further comprising the steps of:

(a) displaying images

(i) based on the video signals

(ii) in a first window on one of the display devices; and

(b) displaying information

(i) based on the data conferencing signals

(ii) in a second window on the display device.

31. The method of claim 29, further comprising the step of:

(a) using control signals

(i) transmitted on the data path

(ii) to control the reproduction

(1) of the video images and audio.

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32. The method of claim 29, further comprising the step of:

(a) reproducing the video images

(i) at greater than 20 frames per second.

33. The method of claim 32, wherein

(a) the video signals are transported in analog.

34. The method of claim 32, wherein

(a) the video images are reproduced in color.

35. The method of claim 32, further comprising the steps of:

(a) combining video images

(i) of at least a first and a second user

(ii) into a mosaic image, and

(b) reproducing the mosaic image

(i) on one of the video display devices.

36. The method of claim 32, further comprising the steps of:

- (a) allowing a first user
 - (i) to use a first graphical user interface
 - (ii) to select a user
 - (iii) from a plurality of users; and
- (b) allowing the first user
 - (i) to use a second graphical user interface
 - (ii) to select a collaboration type
 - (iii) from a group of collaboration types; and
- (c) establishing communication
 - (i) of the selected collaboration type
 - (ii) from the first user
 - (iii) to the selected user.

37. A videoconferencing system
for operation,
with an infrastructure including
at least one video signal source and
at least one video display device,
at least one data communication path
arranged for carrying
the data conferencing signals,
to one of the display devices, and
over at least one unshielded twisted pair of wires
defining a video communication path,

arranged for transport of video signals,
originating at one of the signal sources,
to at least one of the display devices,
the system comprising
(a) at least one processor
(i) capable of
(1) providing data conferencing signals, and
(2) communicating with the data communication path

wherein the system is configured to

- (i) reproduce video images,
 - (1) based on the transported video signals,
 - (2) on the display device, and
- (ii) display information,
 - (1) based on the carried data conferencing signals,
 - (2) on the display device.

38. The system of claim 37, wherein the system is further configured to

- (a) operate with
 - (i) data communication path defined by
 - (ii) at least one unshielded twisted pair of wires.

39. The system of claim 38, wherein:

- (a) images
 - (i) based on the video signals

- (ii) can be reproduced
- (iii) in a first window
- (iv) on a display device, and

(b) information

- (i) based on the data conference signals
- (ii) can be displayed
- (iii) in a second window
- (iv) on this display device.

40. The system of claim 38, wherein the infrastructure further includes:

a control communication path, and

wherein, the system is further configured

- (i) to respond to control signals
 - (1) transmitted over the control communication path
- (ii) to control the display of the video images.

41. The system of claim 40, wherein

(a) at least one unshielded twisted pair of wires defines

- (i) the data path, and
- (ii) the control communication path.

42. The system of claim 40, wherein

(a) at least two video display devices

- (i) each have an associated processor

(ii) to each define a workstation, and
wherein the system is further configured
(iii) to control the reproduction of video images and spoken audio
(1) of a first user of a workstation
(2) at the workstation of a second workstation user.

43. The system of claim 42, wherein

(a) the information
(i) based on the data conferencing signals
(b) can be displayed
(i) interactively.

44. The system of claim 43, wherein the system is configured to

(a) reproduce the video images,
(i) at greater than 20 frames per second.

45. The system of claim 44, wherein

(a) the video signals can be transported in analog.